

Tiny Houses: Business Owner

Performance Task

Introduction

For the past 50 years, American home sizes have been getting bigger and bigger. However, some people are choosing to live in smaller homes to save money, have less impact on the environment, and live a simpler life. Some are even choosing to live in tiny houses, which are homes that are 400 square feet or less. Tiny houses are becoming popular for people with specific needs. One group that can benefit from the tiny house movement are people with disabilities. People with disabilities often struggle to find affordable and wheelchair accessible housing. Through this task, individuals and teams will take on the role of a tiny house business owner, specializing in tiny houses for people with disabilities. The solutions you propose will make affordable home ownership possible for people who may otherwise struggle to find a place to live.

Big Idea / Essential Questions

Big Idea

- Individual choices have costs and benefits.
- The economy affects personal income, individual and family security, and consumer decisions.
- The economic system of production and consumption may be a means to achieve significant societal goals.
- Financial decisions have legal and ethical implications.
- Individuals with disabilities face unique challenges when seeking affordable housing.

Essential Questions

- How do positive and negative incentives influence the decisions that people make?
- How does income affect spending decisions?
- What does it mean to be a responsible consumer?
- What are the factors to consider when making consumer decisions?
- What makes housing “accessible” to a person with disabilities?

G.R.A.S.P.

Goal

Your goal is to design and market a tiny house that can accommodate the physical and financial needs of a person with disabilities.

Role

You are a tiny house business owner. Your business specializes in the unique needs and wants of customers with disabilities.

Audience

Your audience will be potential customers with disabilities who are considering purchasing a tiny house.

Situation

People with disabilities often struggle to find affordable and wheelchair accessible housing. Tiny houses can offer privacy, comfort and customization for people with specific needs that traditional homes may not be able to provide for an affordable price. As a Tiny House Business Owner specializing in individuals with disabilities, you and your design team will be designing a tiny house prototype by investigating the unique housing needs of people with disabilities and the potential benefits of tiny house ownership.

Products

1. Client Interview Questions

suggested first product:

Disability is a term used to represent many unique needs. While each individual disability may require specific accommodations, many adults with disabilities have the same desire: to have more independence and freedom to make choices about their environment. You will need to conduct an interview of a person with a disability. Your interview questions should be designed to help you understand the unique housing challenges and interests of a person with a disability. You may wish to interview multiple people to gain a greater understanding of the variety of potential challenges as well as common needs across disabilities. The purpose of this interview is to gather information that will be helpful to you as you design your tiny house.

Client Interview Questions

Achievement Levels	1	2	3
Context	Student questions demonstrate a limited understanding of the topic and show	Student questions demonstrate a partial understanding of the topic and	Student questions demonstrate a deep understanding of the topic and show

Achievement Levels	1	2	3
Purpose/Open-Ended (x1)	minimal analytical and original thought. Student develops questions that lead to an incomplete response and/or inadequate understanding.	show some analytical and original thought. Student develops questions that lead to a general response and/or adequate understanding.	substantial analytical and original thought. Student develops questions that lead to a comprehensive and pertinent response and/or complex understanding.
Clarity (x1)	The student develops questions that are incomplete or impossible to answer.	The student develops questions that are general and may be difficult to answer.	The student develops questions that are stated clearly and succinctly.
Focus (x1)	Student provides answers to few of the questions that include some of the needed information, with major errors and/or omissions.	Student provides answers to the questions that include some of the needed information.	Student provides answers to the questions that clearly include all the needed information.

2. Personal Budget

When purchasing a home, there are many things homeowners must consider. It is helpful to create a personal budget to make sure you do not live beyond your means. Will a budget be different for an owner of a Tiny House? If so, how? You will need to create a personal budget for a tiny house owner. The below worksheet includes budget items and amounts of an average US homeowner. Your task is to estimate what will be less expensive for a tiny house owner, and what might be the same. Then, your goal is to calculate the potential savings for a tiny house owner.

Link to the Budget Worksheet here [Tiny House Personal Budget Worksheet](#)

****Teachers: You need to make your own copy in order to save and edit the worksheets. Do this by either going to "File" - "Download" to put it on your computer, or "File" - "Make a Copy" will put in your google drive.**

Personal Budget

Achievement Levels	1	2	3	4
Fractions (x1)	Product shows minimal understanding of fraction concepts by representing few of the Tiny House's budget lines as a realistic portion or whole of the average.	Product shows basic understanding of fraction concepts by representing some of the Tiny House's budget lines as a realistic portion or whole of the average.	Product shows adequate understanding of fraction concepts by representing most of the Tiny House's budget lines as a realistic portion or whole of the average.	Product shows strong understanding of fraction concepts by representing all of the Tiny House's budget lines as a realistic portion or whole of the average.
Place Value and Rounding Decimals (x1)	Product shows little understanding of place value with decimals by rounding few correctly.	Product shows some understanding of place value with decimals by rounding some correctly.	Product shows a satisfactory understanding of place value with decimals by rounding most correctly.	Product shows strong understanding of place value with decimals by correctly rounding when necessary.
Decimal Operations (x1)	Product shows few correct work and solutions when performing operations with decimals.	Product shows some correct work and solutions when performing operations with decimals.	Product shows most correct work and solutions when performing operations with decimals.	Product shows all correct work and solutions when performing operations with decimals.
Communication and Reasoning	Student does not use research or math work when	Student minimally justifies their conclusions to others	Student sufficiently justifies their conclusions to others	Student thoroughly justifies their conclusions to others

3. Energy Comparison

The cost of energy for a home varies based on a variety of factors. Some of the main factors are the size of the home and where you live. You will calculate an average energy cost of a traditional house vs a Tiny House to see how much money can be saved a year by owning a Tiny House. The attached worksheet will help guide your calculations. You will also need the Price of Electricity in Your State website below.

****Teachers: You need to make your own copy in order to save and edit the worksheets. Do this by either going to "File" - "Download" to put it on your computer, or "File" - "Make a Copy" will put in your google drive.**

****[worksheet](#)**

****[Price of Electricity in Your State Website](#)**

You will be using this information to demonstrate the potential benefits of tiny house ownership for a person on a budget. Be sure to show all of your computations and that every section is labeled with the correct units.

Energy Comparison

Achievement Levels	1	2	3	4
Place Value and Decimals (x1)	Product shows little understanding of rounding and operations in base ten.	Product shows some understanding of place value with decimals by converting and rounding when necessary.	Product shows a satisfactory understanding of place value with decimals by converting and rounding when necessary.	Product shows strong understanding of place value with decimals by converting and rounding when necessary.
Math Calculations (x1)	Few mathematical calculations are correctly shown and units are accurate.	Some mathematical calculations are correctly shown and units are accurate.	Most mathematical calculations are correctly shown and units are accurate.	All mathematical calculations are correctly shown and units are accurate.
Chart Content (x1)	Few sections of the chart are correct and complete with appropriate labels and units.	Some sections of the chart are correct and complete with appropriate labels and units.	Most sections of the chart are correct and complete with appropriate labels and units.	All sections of the chart are correct and complete with appropriate labels and units.
Math Practices (x1)	Student inaccurately uses math tools, reasoning and/or precision.	Student somewhat uses math tools, reasoning and/or precision to determine the energy savings.	Student mostly uses appropriate math tools, reasoning and precision to determine the energy savings.	Student uses appropriate math tools, reasoning and precision to determine the energy savings.

4. Tiny House Advertisement

Target audiences are very important when creating advertisements and marketing materials. A deep understanding of the needs and wants of potential customers can

make the difference between a sale and a lost opportunity. You will need to create an advertisement for your tiny house design. The advertisement can be a print ad, a promotional video, a sample web page, or any other type of print or digital advertisement. Explore different types of advertisements. Where might your target audience look when considering purchasing a home? What language would influence their decision? How can you use your research about personal budgeting and energy savings in your advertisement? Be sure to keep your writing focused but detailed enough to persuade potential clients to consider working with your company.

Tiny House Advertisement

Achievement Levels	1	2	3	4
Economic and Personal Finance Concepts (x1)	The product provides minimal understanding of critical economic and personal finance concepts to help create a successful advertisement.	The product provides some understanding of critical economic and personal finance concepts to help create a successful advertisement.	The product provides adequate understanding of critical economic and personal finance concepts to help create a successful advertisement.	The product provides strong understanding of critical economic and personal finance concepts to help create a successful advertisement.
Effective Marketing (x1)	Marketing is minimally effective because it vaguely addresses a prospective buyer/audience, shares little information about the business and demonstrates a poor choice of media/language.	Marketing is somewhat effective because it partially addresses a prospective buyer/audience, shares some information about the business and demonstrates a fair choice of media/language.	Marketing is mostly effective because it addresses a prospective buyer/audience, shares information about the business and its goals and demonstrates a good choice of media/language.	Marketing is effective because it addresses a well-defined prospective buyer/audience, shares critical information about the business and its goals and demonstrates an excellent choice of media/language.
Research (x1)	The product shows that students minimally examined complex ideas and information.	The product shows that students partially examined complex ideas and information in order to select and organize somewhat relevant content.	The product shows that students adequately examined complex ideas and information in order to select and organize relevant content.	The product shows that students thoroughly examined complex ideas and information in order to select and organize highly relevant content.
Multimedia (x1)	The technology applications utilized do not connect the presentation and topic. The graphics and fonts are unattractive and do not connect with the topic of the presentation.	The technology applications utilized connect the presentation and topic. Some graphics and fonts are attractive and connect with the topic of the presentation.	The technology applications utilized enhance the presentation and topic. Most graphics and fonts are attractive and support the topic of the presentation.	The technology applications utilized strongly enhance the presentation and topic. All graphics and fonts are attractive and support the topic of the presentation.

5. Tiny House Model

The target audience for your tiny house company has specific needs and wants. It may be difficult to explain exactly how your proposed design meets those needs and wants. You will need to create a model of your proposed design. The model should show how you can maximize 100 – 400 square feet to meet the specific needs of your target audience. Start with a sketch or design plan. Consider using graph paper to ensure your measurements are accurate and precise. What special design features must your home have?

Using your design plan, create a physical or digital model. How can you create a model that will convince potential customers a tiny house is the right choice for them?

Tiny House Model

Achievement Levels	1	2	3	4
Math Practices in the Design Process (x1)	Product shows little attention to precision and an attempt to use mathematical tools in the design process.	Product shows partial attention to precision and some use of mathematical tools in the design process.	Product shows attention to precision and adequate use of mathematical tools in the design process.	Product shows great attention to precision and excellent use of mathematical tools in the design process.
Model (x1)	The model is a minimally accurate with respect to the plans, diagrams, and/or drawings.	The model is a somewhat accurate reproduction of the plans, diagrams, and/or drawings. It has some detail.	The model is a mostly accurate reproduction of the plans, diagrams, and/or drawings. It has adequate attention to detail.	The model is an accurate reproduction of the plans, diagrams, and/or drawings. It has great attention to detail.
Research (x1)	Product demonstrates a lack of research conducted around the topic.	Product demonstrates that some research was conducted around the topic.	Product demonstrates that research was conducted around the topic using few credible or appropriate sources.	Product demonstrates that thorough research was conducted around the topic using several credible and appropriate sources.
Engineering Design (x1)	Product minimally demonstrates an understanding of the design problem and the solutions that reflect little consideration of the audience for whom the product is created.	Product somewhat demonstrates an understanding of the design problem and partially communicates the solutions that reflect some consideration of the audience for whom the product is created.	Product adequately demonstrates an understanding of the design problem and communicates the solutions that reflect satisfactory consideration of the audience for whom the product is created.	Product strongly demonstrates an understanding of the design problem and communicates the solutions that reflect through consideration of the audience for whom the product is created.